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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kouji Yoshida

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08/08/2006

C. IRVIN MCCLELLAND

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.

1940 DUKE STREET

ALEXANDRIA, VA 22314

EXAMINER

ABEL JALIL, NEVEEN

ART UNIT

PAPER NUMBER

2165

DATE MAILED: 08/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/758,289

Applicant(s)

YOSHIDA ET AL.

Examiner

Neveen Abel-Jalil

Art Unit

2165

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on July 13, 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 95-108, 112 and 115 is/are pending in the application.
- 4a) Of the above claim(s) 105-108, 112 and 115 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 95-104 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. The Amendment filed on July 13, 2006 has been received and entered. Claims 95-108, 112, and 115 are now pending, of which claims 105-108, 112, and 115 are withdrawn from consideration.

2. Applicant's Amendment has overcome the previous claim objections.

The Examiner appreciates the incorporation of allowable subject matter into the Independent claims but will maintain the previous art rejection in light of issues presented in this office action.

Election/Restrictions

3. This application contains claims 105-108, 112, and 115 drawn to an invention nonelected with traverse on May 6, 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Objections

4. Claims 95, 99, and 101-103 are objected to because of the following informalities:

Claims 95 and 102, recite "*for* dividing", which constitute intended use and does not carry patentable weight since it never has to occur. Claim should be amended to recite more firm and positive language (i.e. "to divide", "is", "that" or "dividing").

Claims 99, 101, and 103, in various lines re-introduce

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 95, and 102 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. That claims do not recite a practical application by producing a physical transformation or producing a useful, concrete, and tangible result. To perform a physical transformation, the claimed invention must transform an article of physical object into a different state or thing. Transformation of data is not a physical transformation. A useful, concrete, and tangible result must be either specifically recited in the claim or flow inherently therefrom. To be useful the claimed invention must establish a specific, substantial, and credible utility. To be concrete the claimed invention must be able to produce reproducible results. To be tangible the claimed invention must produce a practical application or real world result. In this case the claims fail to perform a physical transformation because the claims are directed to operating on data. The claims also fail to produce a tangible result because the recitation of "said group of data is edge detection data obtained by" does not provide a presentation or storage. Is the group of data shown to the user (generated)? Or is the list of group data stored for subsequent use? Claims need to be amended to recite a tangible result.

Art Unit: 2165

7. Claims 95, and 102 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The body of the claim appears to be directed to software per se only without any tangible embodiment. Computer software must be stored and executed on computer hardware tied the elements of the body of the claim in order to realize their functionality. Claim 95 appears to be directed to software per se without any hardware tied to method steps in the body of the claim. While claim 102, does recite "data dividing unit" which doesn't appear to have enough definition in the specification in order to consider it to be a "computer, database, or hardware" system. Claims should be amended to recite "storage or display of computer hardware/database" in the body of the claim.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 95, 98, and 102 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 95 recites the limitation "said boundary candidates" in line 12. There is insufficient antecedent basis for this limitation in the claim. It's unclear whether the reference is to M or N or both candidate groups.

Claim 98 recites the limitation "the basis of said respective positions of said N boundary" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim 102 recites the limitation "said boundary candidates" in line 13. There is insufficient antecedent basis for this limitation in the claim. Its unclear whether the reference is to M or N or both candidate groups.

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

11. Claims 95-98, 100-102, and 104 are rejected under 35 U.S.C. 102(b) as being anticipated by Ort et al. (U.S. Patent No. 5,659,626).

As to claims 95, and 102, Ort et al. discloses a data classification apparatus for classifying a group of data which a data storage unit stores into a plurality of sets in accordance with data values, comprising:

a first data dividing unit which estimates N boundary candidates (wherein N is an integer of 2 or more) for a dividing said group of data into a first number of sets on the basis of said data values (See column 24, lines 57-65, wherein "dividing" reads on "filter"); and

a second data dividing unit which is eclectically connected to the first data dividing unit and extracts M boundary candidates (wherein M is smaller than N) and is used to (Intend use recitation and therefore the recitation following does not patentable weight) divide said group of data into a second number of sets smaller than said first number, under a predetermined extraction condition, on the basis of said N boundary candidate (See column 21, lines 45-56, also see column 19, lines 20-28),

wherein said group of data is edge detection data obtained by edge detecting image pick-up data of each of pixels obtained by picking up different image patterns in a predetermined image pick-up field in accordance with positions of said pixels, and said boundary candidates are positions of said pixels (See column 41, Table 4, gives positions of features).

As to claim 96, Ort et al. discloses wherein said predetermined extraction condition includes a condition that said M boundary candidates are extracted on the basis of a magnitude of a data value indicated by each of said N boundary candidates (See column 25, lines 1-15, wherein "magnitude" reads on "number of total features").

As to claim 97, Ort et al. discloses wherein said predetermined extraction condition includes a condition that a boundary with which said data value is maximized is extracted (See column 25, lines 16-35).

As to claim 98, Ort et al. discloses wherein said group of data are arranged at positions in a predetermined direction, and said predetermined extraction condition includes a condition that

said M boundary candidates are extracted on the basis of the respective positions of said N boundary candidates (See column 17, lines 31-45, wherein "positions in a predetermined direction" reads on "location").

As to claims 100, and 104, Ort et al. discloses wherein N is two, and M is one (See column 18, lines 60-67, wherein "N is two" reads on "two dimensional", also see column 20, lines 42-45, wherein "M is one" reads on "ratio of 1").

As to claim 101, Ort et al. discloses wherein said group of data are luminance data of each of pixels obtained by picking up different image patterns in a predetermined image pick-up field (See column 26, lines 39-56).

Allowable Subject Matter

12. Claims 99, and 103 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

13. Applicant's arguments with respect to claims 95-108, 112, and 115 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's reinstatement argument has been previously addressed. No arguments were presented with regards to cited reference.

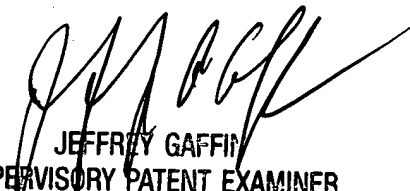
Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neveen Abel-Jalil
August 4, 2006


JEFFREY GAFFIN
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